

Appl. No.: 10/574,700

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### AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in this application.

1-5. (Cancelled).

6. (Currently Amended) A low cost electric power generating apparatus for decentralized power supply, consisting essentially of

a permanent magnet type electric power generator driven by revolutions of a windmill or a waterwheel,

said power generator comprising a first insulated winding and a second insulated winding,

said first winding having a smaller number of turns than said second winding,

said first winding producing a lower induced voltage than said second winding due to said smaller number of turns,

said first winding being connected to a first rectifier which rectifies an alternating current power input from said first winding to a direct current power output of the first rectifier,

said second winding being connected in series to a saturated reactor, said reactor comprising a core that becomes saturated as alternating current power input from said second

winding to said core is increased to exceed a certain value, and then the inductance value of the reactor decreases gradually as the alternating current power input to said core from said second winding increases,

said saturated reactor being connected to a second rectifier which rectifies an alternating current power input from such saturated reactor to a direct current power output of the second rectifier, and

the direct current power outputs of said first rectifier and said second rectifier being connected in parallel, so that when the number of the revolutions is below a specified value, output from the second winding is used, and when the number of the revolutions exceeds said specified value, output from the first winding and output from the second winding are used, whereby and a total output from the first winding and the second winding is approximately equal to the maximum output curve relative to the number of the revolutions.

7. (Currently Amended) An electric power generating apparatus according to claim 6, further consisting essentially of a constant-voltage power supply to which the direct current power outputs of said first rectifier and said second rectifier are connected, whereby and wherein the constant-voltage power supply is charged by said direct current power outputs.

8. (Previously Presented) An electric power generating apparatus according to claim 7, wherein the constant-voltage power supply is a battery.

9-14. (Cancelled).

15. (New) A low cost electric power generating apparatus for decentralized power supply, consisting essentially of

a permanent magnet type electric power generator driven by revolutions of a windmill or a waterwheel,

said power generator comprising a first insulated winding and a second insulated winding,

said first winding having a smaller number of turns than said second winding,

said first winding producing a lower induced voltage than said second winding due to said smaller number of turns,

said first winding being connected to a first rectifier which rectifies an alternating current power input from said first winding to a direct current power output of the first rectifier,

said second winding being connected in series to a saturated reactor, said reactor comprising a core that becomes saturated as alternating current power input from said second winding to said core is increased to exceed a certain value, and then the inductance value of the reactor decreases gradually as the alternating current power input to said core from said second winding increases,

said saturated reactor being connected to a second rectifier which rectifies an alternating current power input from such saturated reactor to a direct current power output of the second rectifier, and

the direct current power outputs of said first rectifier and said second rectifier being connected in parallel, so that when the number of the revolutions is below a specified value, output from the second winding is used, and when the number of the revolutions exceeds said specified value, output from the first winding and output from the second winding are used, and a total output from the first winding and the second winding is

approximately equal to the maximum output curve relative to the number of the revolutions,

said electric power generating apparatus being devoid of any anemometer.

16. (New) An electric power generating apparatus according to claim 15, further consisting essentially of a constant-voltage power supply to which the direct current power outputs of said first rectifier and said second rectifier are connected, and wherein the constant-voltage power supply is charged by said direct current power outputs.

17. (New) An electric power generating apparatus according to claim 16, wherein the constant-voltage power supply is a battery.

18. (New) A low cost electric power generating apparatus for decentralized power supply, consisting essentially of

a permanent magnet type electric power generator driven by revolutions of a windmill or a waterwheel,

said power generator comprising a first insulated winding and a second insulated winding,

said first winding having a smaller number of turns than said second winding,

said first winding producing a lower induced voltage than said second winding due to said smaller number of turns,

said first winding being connected to a first rectifier which rectifies an alternating current power input from said first winding to a direct current power output of the first rectifier,

said second winding being connected in series to a saturated reactor, said reactor comprising a core that becomes saturated as alternating current power input from said second winding to said core is increased to exceed a certain value, and then the inductance value of the reactor decreases gradually as the alternating current power input to said core from said second winding increases,

said saturated reactor being connected to a second rectifier which rectifies an alternating current power input from such saturated reactor to a direct current power output of the second rectifier, and

the direct current power outputs of said first rectifier and said second rectifier being connected in parallel, so that when the number of the revolutions is below a specified value, output from the second winding is used, and when the number of the revolutions exceeds said specified value, output from the first winding and output from the second winding are used, and a total output from the first winding and the second winding is approximately equal to the maximum output curve relative to the number of the revolutions,

said electric power generating apparatus being devoid of any pulse width modulation converter.

19. (New) An electric power generating apparatus according to claim 18, wherein said electric power generating apparatus is devoid of any anemometer.

20. (New) An electric power generating apparatus according to claim 18, further consisting essentially of a constant-voltage power supply to which the direct current power outputs of said first rectifier and said second rectifier are connected, and wherein the constant-voltage power supply is charged by said direct current power outputs.

21. (New) An electric power generating apparatus according to claim 20, wherein the constant-voltage power supply is a battery.

22. (New) An electric power generating apparatus according to claim 19, further consisting essentially of a constant-voltage power supply to which the direct current power outputs of said first rectifier and said second rectifier are connected, and wherein the constant-voltage power supply is charged by said direct current power outputs.

23. (New) An electric power generating apparatus according to claim 22, wherein the constant-voltage power supply is a battery.

24. (New) A low cost electric power generating apparatus for decentralized power supply, comprising:

a permanent magnet type electric power generator driven by revolutions of a windmill or a waterwheel,

said power generator comprising exactly two insulated windings,

said power generator comprising exactly one saturated reactor;

a first one of said windings having a smaller number of turns than a second one of said windings,

said first winding producing a lower induced voltage than said second winding due to said smaller number of turns,

said first winding being connected to a first rectifier which rectifies an alternating current power input from said first winding to a direct current power output of the first rectifier,

said second winding being connected in series to said saturated reactor, said reactor comprising a core that becomes saturated as alternating current power input from said second winding to said core is increased to exceed a certain value, and then the inductance value of the reactor decreases gradually as the alternating current power input to said core from said second winding increases,

said saturated reactor being connected to a second rectifier which rectifies an alternating current power input from such saturated reactor to a direct current power output of the second rectifier, and

the direct current power outputs of said first rectifier and said second rectifier being connected in parallel, so that when the number of the revolutions is below a specified value, output from the second winding is used, and when the number of the revolutions exceeds said specified value, output from the first winding and output from the second winding are used, and a total output from the first winding and the second winding is approximately equal to the maximum output curve relative to the number of the revolutions.

25. (New) An electric power generating apparatus according to claim 24, wherein said electric power generating apparatus is devoid of any anemometer.

26. (New) An electric power generating apparatus according to claim 24, wherein said electric power generating apparatus is devoid of any pulse width modulation converter.

27. (New) An electric power generating apparatus according to claim 25, wherein said electric power generating apparatus is devoid of any pulse width modulation converter.

28. (New) An electric power generating apparatus according to claim 24, further comprising a constant-voltage power supply to which the direct current power outputs of said first rectifier and said second rectifier are connected, and wherein the constant-voltage power supply is charged by said direct current power outputs.

29. (New) An electric power generating apparatus according to claim 25, wherein the constant-voltage power supply is a battery.

30. (New) An electric power generating apparatus according to claim 27, further comprising a constant-voltage power supply to which the direct current power outputs of said first rectifier and said second rectifier are connected, and wherein the constant-voltage power supply is charged by said direct current power outputs.

31. (New) An electric power generating apparatus according to claim 27, wherein the constant-voltage power supply is a battery.